



# Army Organization and Doctrine

**Purpose: Unit member must possess basic knowledge of Army structure and doctrine to provide quality weather support to operations.**





# Army Organization and Doctrine

## Army Command / Staff

**CO - Commander**  
**XO - Executive Officer**  
**S1/ G1 - Personnel / Administration**  
**S2/ G2 - Intelligence**  
**S3/ G3 - Operations**  
**S4/ G4 - Logistics/ Support**  
**G5 - Civil Affairs (Div & above)**  
**J5 - Plans (Joint)**  
**S6/ G6/ J6 - C 3 Systems (Jt Staff)**  
**J7 - Civil Mil Ops (Jt Staff)**  
**J8 - Force Structure/ Resources/ Finance**

**S = Battalion/  
Brigade**  
**R = Regiment**

**All units  
commanded by a  
colonel, or lower,  
have an S prefix  
(ex: S-2)**

**All units  
commanded by a  
General have an  
G prefix (ex: G-  
2)**

**Staff Weather is aligned under S2/G2 Intel Office**



# Army Organization and Doctrine

## Army Unit Structure

<u>Army Unit</u>	<u>Consists of:</u>	<u>CC</u>	<u>Size</u>	<u>AF</u>
ARMY/EAC 100,000+	2-3 CORPS None		★★★★	
CORPS # AF	2-4 Divisions		★★★	50,000
Division	3-5 Brigades★★		12-15,000 Wing	
Brigade/Rgmnt 3,500 Group	3-5 Battalion		★/Colonel	2,500-
Battalion/Squadron Colonel 600	3-5 Companies Group			Lt
Company/Troop	3-5 Platoons	Captain	120-150	Flight
Platoon	3-5 Squads	Lieutenant		40-60



# Army Organization and Doctrine

## Army Unit Structure

**The CORPS is the largest standing tactical unit in**

**Example of a CORPS: XVII Airborne Corps**

**XVII Airborne Corps consists of:**

**Divisions: 10th Mountain, 3rd Infantry (Mech), 82nd Airborne, 101st Airborne Divisions**

**Brigades: 18th Aviation, 525th MI, 18th MP, 35th Sig, 20th Engineer, 2nd Armored Cav (Reg), Air Defense Artillery, 18th Field Artillery Brigades**



# Army Organization and Doctrine

## Army Battlefield

### Three Parts of Battlefield: Close, Deep, and Rear B

**Close Battle:** This is the front line. Soldiers engaged in battle.

**Deep Battle:** Includes the enemy's second echelon forces. Army defines Deep Battle targets via helicopter deep attack, air interdiction, artillery, and psyops.

**Rear Battle:** Includes the communications zone to allow the commander to focus in on bypassed enemy forces or enemy SOF operating in the rear.





# **Army Organization and Doctrine**

## **Battlefield Operating System**

**The Army fights as a combined arms team, each m function is known as a Battlefield Operating System.**

**Armor: Fielded with M1A1 Abrahms tanks.  
Dedicated to armored/mechanized warfare.**

**Infantry: Four types of Infantry:**

**Special Forces: Trained in special recon,  
unconventional warfare, and direct fighting.**

**Aviation: The US Army has more aircraft than  
any other service, most are helicopters**

*Continued*



# Army Organization and Doctrine

## Battlefield Operating System

### The Army Battlefield Operating System (BOS) contains

**Field Artillery:** Using both self-propelled and towed artillery tubes for close battle support, counter-battery, and deep ops

**Engineers:** Constructs obstacles and fighting positions; also clears obstacles for mobile ops and builds airfields and roads

**Military Police:** Provide installation security; traffic control and security along supply routes; also provide POW security

**Air Defense Artillery:** Defense against air threats including ballistic missiles.

**Signal:** Provides communication links to all echelons

**Support:** Provides logistics (Trans, Ordinance, Quartermaster) finance.



# Army Organization and Doctrine

## Battlefield Operating System

### Types of basic Infantry units:

#### *Infantry: Four types of Infantry:*

- **Mechanized:** Equipped with M2 Bradley Fighting Vehicle. Dedicated to provide infantry support to Armored warfare.
- **Light:** Equipped with HMMWVs for high mobility; can fight in varied terrain. Light Infantry fight on foot and lack heavy weapons associated with Mechanized units.
- **Airborne:** Light infantry designed for forced entry into denied areas
- **Air Assault:** Light infantry utilizing mobility of the helicopter





# Army Organization and Doctrine

## Battlefield Operating System

### Types of Army aviation units:

#### *Aviation: Three types:*

- **Lift:** Utilizes the CH-47 Chinook helicopter and the UH-60 Black Hawk. These aircraft are used for air assault, sling loading of equipment, transportation of personnel and supplies, and command and control.
- **Attack:** Main attack helicopter is the AH-64D Apache (Longbow) and some AH-1s. Designed for deep attack missions or close air support to the close battle. The OH-58D Kiowa are used as laser scouts and can carry Hellfire missiles (like the AH64D), in an attack role.
- **Cavalry:** Air Cavalry unit use the OH-58D Kiowa Warrior for reconnaissance and screening; and also for



# Army Organization and Doctrine

**Weather Units supporting**

**Korea  
ARMY PACIFIC  
COMMAND  
Fort Shafter, HI**





# Army Organization and Doctrine

## Six Principles of Army Weather Support

- **Accuracy of data and information** - May be quantified and presented to decision makers so they may place an appropriate weight and level of confidence in them when making decisions.
- **Timeliness of data and information** - Weather information that could influence an operation or program is worthless when the commander receives it after an opportunity has passed, an irreversible decision has been made, or an operation is complete.
- **Relevance to the operational user** - Weather personnel must tailor the information for specific applications so the user can quickly identify and apply relevant information without additional analysis or manipulation.



# Army Organization and Doctrine

## Six Principles of Army Weather Support

- **Unity of effort** - All elements comprising this database must be passed up to the OWS and/or weather strategic centers. Within a theater of operations, or for a particular JOA, there must be unity of effort to ensure the weather database is complete and accurate.
- **Readiness** - All Army weather resources must be maintained in a degree of readiness that ensures employment capability commensurate with the unit's mission.
- **Evaluation of effectiveness** - The overall effectiveness of the Army weather support is based on the successful and effective accomplishment of specific military missions. Each weather organization must



# Army Organization and Doctrine

## Joint Weather Operations

### Theater Communication

- The Army has overall responsibility for the success of weather support to Army operations. The Air Force provides or arranges for all direct and indirect weather services the Army requires (AR 115-10/AFJI 15-157)
- The Air Force is responsible for the part of the architecture that connects weather teams and OWSs to the Army's tactical communications within the theater.
- The highest Army headquarters within the theater accepts the handoff of weather data at the interface point from Air Force communications and retransmits over Army area tactical communications links to lower echelons



# Army Organization and Doctrine

## Joint Weather Operations

***US Army through subordinate commands, provides:***

- Surface observations forward of the division command elements and all upper-air observations to support military operations.
- Critical threshold values for determining the weather effects on weapon systems, tactics, and operations.
- Communications circuits and equipment for passing weather data
- Combat and soldier training skills for AFW personnel
- Technology development to exploit existing and planned





# Army Organization and Doctrine

## Joint Weather Operations

### ***ARMY PROPONENTS FOR WEATHER SUPPORT***

**US Army Intel Center** - Training and Doctrine (TRADOC)  
proponent

- Identifies, validates, and documents weather and environmental data requirements and their critical thresholds that impact Army operations.
- Determines how the data can be integrated, processed, tailored to user specifications, and disseminated to all users on the battlefield.
- Monitors the effectiveness of weather support, identifying any deficiencies and facilitating solutions.
- Represents the Army to outside organizations on all matters regarding weather and environmental support.



# Army Organization and Doctrine

## Joint Weather Operations

### ***ARMY PROPONENTS FOR WEATHER SUPPORT***

#### **INTELLIGENCE OFFICER (J2, G2, S2)**

- The G2/S2 is responsible for staff oversight of the SWO, who is a member of the commander's special staff.
- Determines how the data can be integrated, processed, tailored to user specifications, and disseminated to all users on the battlefield.
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# Army Organization and Doctrine

## Joint Weather Operations

### ***ARMY PROPONENTS FOR WEATHER SUPPORT***

#### **FIELD ARTILLERY METEOROLOGY**

- Within an Army command, ARTYMET sections are responsible for measuring surface and upper air meteorological data.
- Atmospheric data obtained by an ARTYMET section is vital for accurate artillery fires and helps develop weather forecasts.
- Message formats are:
  - » Computer meteorological.
  - » Ballistic meteorological.
  - » Fallout prediction meteorological.
  - » Target acquisition meteorological.
  - » World meteorological organization



# Army Organization and Doctrine

## Joint Weather Operations

### ***ARMY PROPONENTS FOR WEATHER SUPPORT***

#### ***ARMY ENGINEERS***

- The mission of the topographic engineer terrain analysis detachment is to interpret the natural and manmade features of a geographic area.
- Some terrain analysis products that require weather data and information include—
  - » Mobility and visibility overlays.
  - » River stage and flood forecasting.
  - » Tactical dam analysis.
  - » Special terrain and geography studies.



# Army Organization and Doctrine

## Joint Weather Operations

### ***AF WEATHER SUPPORT TO THE ARMY COMBAT MISSION***

Joint Reg AR 115-10/AFJI 15-157 stipulates AF weather will provide weather support for :

- » Theater Army, corps, divisions, separate brigades, aviation brigades, ACRs, ranger regiments, aviation battalions, and Special Forces according to jointly agreed doctrine and operational support concepts.
- » Lower echelons, as required by the theater commander.
- » Support operations or other unique situations where the use of standard doctrinal support is not appropriate.



# Army Organization and Doctrine

## Joint Weather Operations

### ***AF WEATHER SUPPORT TO THE ARMY COMBAT MISSION***

#### AF weather will provide:

- » weather training for Army ATC personnel assigned to take limited surface weather observations.
- » weather warnings and advisories of expected weather that may adversely affect operations or harm personnel.
- » weather data used by Army engineers to determine trafficability and hydrological conditions (we don't do soil types).
- » weather effects on weapon systems, tactics, and operations
- » climatological support for tactical missions, IPB, TDA modeling, and simulation.





# Army Organization and Doctrine

## Joint Weather Operations

### ***AF WEATHER SUPPORT TO THE ARMY COMBAT MISSION***

#### The Staff Weather Officer (SWO) function

- The SWO is the senior weather officer, or noncommissioned officer, when no officers are assigned
- The SWO is a member of the Army commander's special staff and is under the general staff supervision of the G2/S2.
- The Army commander has operational control (OPCON) of the SWO.
- The SWO manages the operations of both the CWT when deployed in a contingency or exercise and the weather detachment, flight, or weather squadron in peacetime.



# Army Organization and Doctrine

## Joint Weather Operations

### ***AF WEATHER SUPPORT TO THE ARMY COMBAT MISSION***

#### The Staff Weather Officer (SWO) function:

- Advises the Army commander on AFW capabilities, support limitations, and the ways weather information can enhance combat operations.
- Prepares inputs for weather annexes to plans of the supported command.
- Ensures weather communications requirements are documented.
- Coordinates communications support for passing weather data.



# Army Organization and Doctrine

## Joint Weather Operations

### ***AF WEATHER SUPPORT TO THE ARMY COMBAT MISSION***

#### The Staff Weather Officer (SWO) function *(continued)*

- Works with the G2/S2 to ensure forward area observations and ARTYMET upper-air observations are passed to the CWT
- Provides weather products for the Intelligence Preparation of the Battlefield (IPB) (see FM 34-130).
- Ensures weather communications requirements are documented.
- Provides weather briefings to commanders and staff, as requested.



# Army Organization and Doctrine

## Joint Weather Operations

### JOINT AND COMBINED SUPPORT:

- The Army will not deploy to the battle independently. Force projection always involves at least a second service.
- Joint operations employ a mix of services, tailored to take advantage of each service's unique capabilities (ARFOR, AFFOR and other services).
- The joint METOC forecast unit (JMFU), when located within the JOA, may provide weather support to the different joint headquarters:
  - » Joint Land Force Component Commander (JFLCC)
  - » Joint Force Air Component Commander (JFACC)
  - » Joint Intelligence Center (JIC)
- Joint operations is described in the CINC's METOC Contingency Operations (CONOPs)



# CFC METOC Organization

**CINC**  
**CFC/UNC**

**CMO**  
**Combined METOC Officer**

**CMFU**  
**Combined METOC**  
**Forecast Unit**

**Air**  
**Component**  
**Command**  
**ACC**  
**SWO**  
USAF 607th  
COS (Combat

**Supports:**

HQ ACC,  
7AF,  
ROKAF  
at the  
HTACC  
(Hardened  
Tactical Air  
Control  
Center)

**Ground**  
**Compnt**  
**Command**  
**GCC**  
**SWO**  
USAF EUSA  
SWO

EUSA/ASC  
C Army  
Service  
Component  
Command  
at CP  
OSCAR  
and  
ROK GCC  
via ROKAF  
SWO at  
CP TANGO

**Naval**  
**Compnt**  
**Command**  
**NCC**  
**SWO**  
USS Blue  
Ridge METOC

**Supports:**

US NAVY  
7th Fleet  
and  
ROK Navy

**Combined**  
**Marine**  
**Forces**  
**Command**  
**CMFC**  
**SWO**  
Marine Forces  
Pacific SWO  
(MARFORPAC)

**Supports:**

CMFU,  
CFC TOC  
from  
I MEF,  
III MEF  
SWOs

**Combined**  
**Unconventio**  
**nal Warfare**  
**Task Force**  
**CUWTF**  
**SWO**  
Navy, AF  
SOF

**Supports:**

SOCOM  
(Special  
Operations  
Command)  
Weather  
Units